

INK JET PRINTING APPARATUS WITH INK LEVEL DETECTION

Abstract

A printing apparatus includes a printhead and an ink volume detecting circuit. The printhead contains a plurality of first heating elements for heating ink supplied to the printhead to generate bubbles in the ink and eject the ink through corresponding nozzles. The printhead also contains a second heating element for heating the ink supplied to the printhead, a resistance value of the second heating element being less than the resistance value of each first heating element, and the low resistance value of the second heating element causing the second heating element to burn out and create an open circuit if the volume of the ink is less than a predetermined level. The ink volume detecting circuit is connected to the second heating element for determining if the volume of the ink supplied to the printhead is less than the predetermined level based on a condition of the second heating element.